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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,473	01/06/2004	Brian M. Tierney	033869-001	2339
21839	7590	03/31/2005	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			EASTHOM, KARL D	
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ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

2832

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/751,473	Applicant(s) TIERNEY ET AL. 	
	Examiner Karl D. Easthom	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/13/4</u> . | 6) <input type="checkbox"/> Other: ____.  |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5-8, 10, 14-15, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradley. Bradley discloses the claimed invention at Figs. 1-2, with lead wires 6, resistor body 5 and casing 9, where page 4, lines 50-55 indicates that gas can pass through the casing. For claims 5-6, substantially is a term of degree that overlaps and the device is substantially both flexible and rigid. For claims 7-8 and 18-19, the temperature resistance is understood to mean the device can resist those temperatures, and the device can resist any temperature where resist means it takes time to get to that temperature. Also, resistors get very hot so that the device can withstand that temperature. For claim 10, the openings are between the braids or fibers. Claims 14-15 and 18-19 follow from above.

3. Claims 1, 5-11, 14-15, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by McTavish et al. McTavish discloses the claimed invention at Fig. 1, with lead wires 3, resistor body 1, and casing 42, where col. 8, lines 8-10 discloses the escape of gas and capture of particles. In claim 5, the casing is substantially rigid as depicted, and the term is one of degree. In claim 6, the casing is substantially flexible where the term is one degree. For claims 7-8, the temperature resistance is understood to mean the device can resist those temperatures, and the device can resist any temperature where resist means it takes time to get to that temperature. Also, resistors get very hot so that the device can withstand that temperature. For claim 9, the fasteners are 41. For claim 10, the openings are the pores that allow gas to

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escape. For claim 11, the insulating layer is the tape 43. Claims 14-15 and 18-19 follow from the product.

4. Claims 1-4, 7-8, 14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoke. Yoke discloses the claimed invention at Fig. 1, with lead wires 31a, resistor body 31, and casing 32, where col. 5, lines 40-50 indicates that moisture etc. can pass through the casing since the lubricant and the escape of gas and capture of particles are noted by heating, thus inherently meeting the claim since it could contain any broken pieces if any were present. For claims 2-4, and 16-17, the silaceous filaments are ceramic, and fiberglass, where they are fibrous in nature, and have ceramic products and are described as glass, see cols. 2-3. As to the fiberglass, see Fiberfrax of pure silica at col. 3, lines 60-70, while as to the ceramics see the ceramics listed as components for the E glass fiber. For claims 7-8 and 18-19, see the remarks above. For claims 16-17, the braiding head or wrapping head creates the woven nature of the sheet, or it is woven around the device.

5. Claims 1, 4-5, 7-8, 11, 13-14, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohn. Kohn discloses the claimed invention at Fig. 2, with lead wires 12,9, resistor body 6,4 and casing 1, where page 1, lines 90-105 indicates that gas can pass through the casing. The casing is carborundum at page 1, lines 70-80, a ceramic, for claims 4-5. For claims 7-8 and 18-19, see the remarks above. For claims 11 and 13, the paint or paste coating described at page 3, lines 110-116 is noted to be impermeable. Claim 14 follows from claim 1.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, 12-13 and 16 and rejected under 35 U.S.C. 103(a) as being unpatentable over McTavish et al. in view of Yohe. McTavish discloses the claimed invention except for the materials of claims 2-4 and 16-17, and the layer against the core for claims 12-13. As indicated above, Yohe discloses the materials for the claims of 2-4 and 16-17, and discloses, or indicates they are permeable, while McTavish indicates the need to have a permeable layer, so that such a layer would have been obvious to allow gases to escape. Yohe discloses at col. 1, lines 20-40, as to claims 12-13, that the core should be next to the resistor to make it compact, so that such a modification would have been obvious for that reason.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D. Easthom whose telephone number is (571) 272-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl D Easthom

  
KARL D. EASTHOM  
PRIMARY EXAMINER